



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

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DAVIS

Atty. Ref.: 117-480

Appln. No. 10/679,692

T. C. / Art Unit: 1652

Filed: October 7, 2003

Examiner: Not Known

FOR: MODIFIED CARBOHYDRATE PROCESSING ENZYME

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INFORMATION DISCLOSURE STATEMENT

March 19, 2004

U.S. Patent and Trademark Office
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Sir:

Attached are Forms PTO-1449 listing the enclosed documents.

This Information Disclosure Statement (IDS) is intended to be in full compliance with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under 37 CFR § 1.97(f), to enable Applicants to comply fully. In particular, if any of the listed documents are missing or incomplete, please contact the undersigned who will provide another copy.

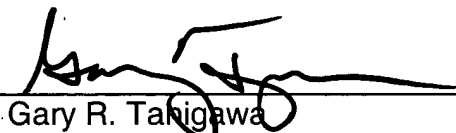
As provided by 37 CFR §§ 1.97(g) and (h), no inference should be made that this information and the listed references are prior art merely because they have been submitted for consideration. Furthermore, no representation is being made that a search has been conducted or that this statement encompasses all possible material information.

Consideration of the foregoing and enclosures, as well as the return of a copy of the Forms PTO-1449 with the Examiner's initials per MPEP § 609, are earnestly solicited. The Examiner is invited to contact the undersigned if any further information is needed.

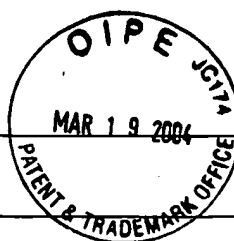
Respectfully submitted,

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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AR						
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FOREIGN PATENT DOCUMENTS

	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
CR	WO 02/080980	10/2002	WIPO			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

DR	Aguilar et al. "Crystal structure of the β -glycosidase from the hyperthermophilic archeon <i>sulfolobus solfataricus</i> : Resilience as a key factor in thermostability" J. Mol. Biol. 271:789-802 (1997)
ER	Andrews et al. "Substrate specificity in glycoside hydrolase family J. Biol. Chem. 275:23027-23033 (2000)
FR	Babcock et al. "Facile preparation of unsymmetric carbodiimides via <i>in situ</i> Tin(II)-mediated heterocumulene metathesis" J. Am. Chem. Soc. 120:5585-5586 (1998)
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IR	Breidt et al. "Nucleotide and deduced amino acid sequences of the <i>staphylococcus aureus</i> phospho- β galactosidase gene" Appl. Environ. Microbiol. 53:969-973 (1987)
JR	Cairns et al. "Primary structure of the dalcocinin-8'-O-beta-glucoside beta-glucosidase from the thai Rosewood Dalbergia cochinchinensis pierre" TREMBL:Q9SPK3
KR	Corbett et al. "Tailoring the substrate specificity of the β -glycosidase from the thermophilic archaeon <i>sulfolobus solfataricus</i> " FEBS Lett. 509:355-360 (2001)
LR	Crout et al. "Glycosidases and glycosyl transferases in glycoside and oligosaccharide synthesis" Curr. Opin. Chem. Biol. 2:98-111 (1998)
MR	Cubellis et al. "Isolation and sequencing of a new β -galactosidase-encoding archaeobacterial gene" Gene 94:89-94 (1990)
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QR	Inoue et al. "Molecular cloning and bacterial expression of cDNA encoding furostanol glycoside 26-O- β -glucosidase <i>Costus speciosus</i> " FEBS Lett. 389:273-277 (1996)
RR	Kaper et al. "Comparative structural analysis and substrate specificity engineering of the hyperthermostable β -glucosidase CelB from <i>Pyrococcus furiosus</i> " Biochem. 39:4963-4970 (2000)
SR	Koeller et al. "Emerging themes in medicinal glycoscience" Nature Biotechnol. 18:835-841 (2000)
TR	Kren et al. "Glycosylation employing bio-systems: From enzymes to whole cell" Chem. Soc. Rev. 26:463-473 (1997)
UR	Krstenansky et al. "Biocatalytic combinatorial synthesis" Bioorganic & Medicinal Chemistry 7:2157-2162 (1999)
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OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)						
AR	Mayer et al. "The E358S mutant of <i>Agrobacterium</i> sp. β -glucosidase is a greatly improved glycosynthase" <i>FEBS Lett.</i> 466:40-44 (2000)					
BR	Moracci et al. "Identification of two glutamic acid residues essential for catalysis in the β -glycosidase from the thermoacidophilic archaeon <i>Sulfolobus solfataricus</i> " <i>Protein Engineering</i> 9:1191-1195 (1996)					
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OR	Voorhorst et al. "Characterization of the <i>celB</i> gene coding for β -glucosidase from the hyperthermophilic archaeon <i>Pyrococcus furiosus</i> and its expression and site-directed mutation in <i>Escherichia coli</i> " <i>J. Bacteriol.</i> 177:7105-7111 (1995)					
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